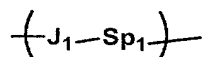


What is claimed is:

1. A cellulose ester film comprising (a) an ultraviolet absorbent polymer having at least one of repeating units represented by the following formulae (1) and (2) and repeating units having ultraviolet absorbent structures represented by the following formulae (3), (4) and (5), (b) an ultraviolet absorbent polymer which is a copolymer of a repeating unit represented by the following formula (6), (7) or (19) with a monomer unit derived from another ethylenically unsaturated monomer, (c) an ultraviolet absorbent polymer which is a copolymer of a monomer represented by the following formula (8) with a monomer represented by the following formula (9), or (d) modified cellulose in which an ultraviolet absorbent structure bonds directly or through a spacer to a hydroxy group of cellulose or its derivative:

formula (1)

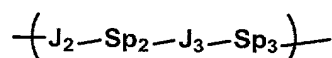


wherein J_1 represents $-O-$, $-NR_1-$, $-S-$, $-SO-$, $-SO_2-$, $-POO-$, $-CO-$, $-COO-$, $-NR_2CO-$, $-NR_3COO-$, $-NR_4CONR_5-$, $-OCO-$, $-OCONR_6-$, $-CONR_7-$, $-NR_8SO-$, $-NR_9SO_2-$, $-SONR_{10}-$, or $-SO_2NR_{11}-$, in which R_1 through R_{11} independently represent a hydrogen atom, a substituted or unsubstituted alkyl group or a substituted or

20250167-00001

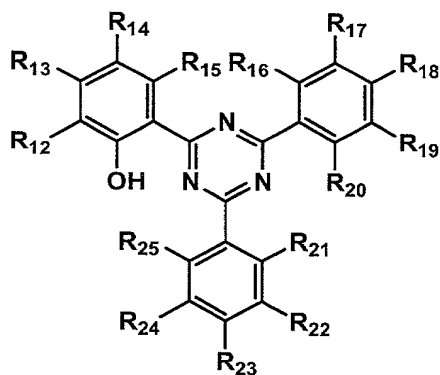
unsubstituted aryl group; and Sp_1 represents a divalent linkage which may have a halogen atom or a substituent, provided that an ultraviolet absorbent structure bonds directly or through a spacer to Sp_1 or forms a part of the polymer main chain,

formula (2)



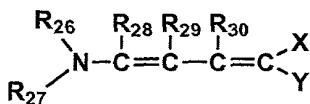
wherein J_2 and J_3 represent the same group as J_1 denoted in formula (1) above, and may be the same or different; Sp_2 and Sp_3 independently represent a divalent linkage which may have a halogen atom or a substituent, and may be the same or different, provided that an ultraviolet absorbent structure bonds directly or through a spacer to at least one of Sp_2 and Sp_3 or forms a part of the polymer main chain in at least one of Sp_2 and Sp_3 ,

formula (3)



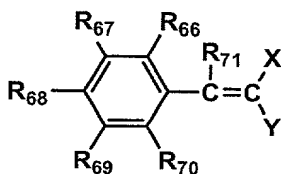
wherein R_{12} through R_{25} independently represent a hydrogen atom, a halogen atom or a substituent, provided that the two adjacent groups of R_{12} through R_{25} may combine with each other to form a ring, and provided that the ultraviolet absorbent structure of formula (3) bonds directly or through a spacer to the polymer main chain or forms a part of the polymer main chain,

formula (4)



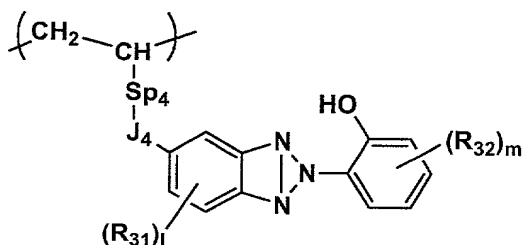
wherein R_{26} and R_{27} independently represent an alkyl group having a carbon atom number of 1 to 10; R_{28} , R_{29} and R_{30} independently represent a substituted or unsubstituted alkyl group, a substituted or unsubstituted alkoxy group, a substituted or unsubstituted alkylthio group or a substituted or unsubstituted amino group; X and Y independently represent an electron withdrawing group, provided that R_{26} through R_{30} , X and Y may have a halogen atom or a substituent or may combine with another to form a 5- or 6-member ring, and provided that the ultraviolet absorbent structure of formula (4) bonds directly or through a spacer to the polymer main chain or forms a part of the polymer main chain,

formula (5)



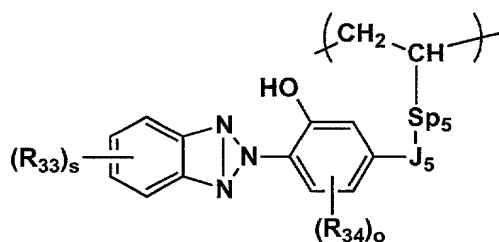
wherein R₆₆ through R₇₁ independently represent a hydrogen atom, a halogen atom or a substituent, provided that the two adjacent groups of R₆₆ through R₇₁ may combine with each other to form a ring; X and Y independently represent an electron withdrawing group, provided that X and Y may have a halogen atom or a substituent but do not combine with each other to form a ring; and provided that the ultraviolet absorbent structure of formula (5) bonds directly or through a spacer to the polymer main chain or forms a part of the polymer main chain,

formula (6)



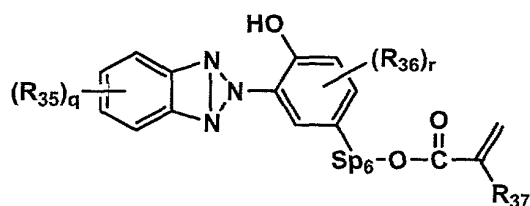
wherein R₃₁ and R₃₂ independently represent a halogen atom or a substituent; l represents 0, 1, 2, or 3, provided that when l is 2 or 3, plural R₃₁s may be the same or different; m represents 0, 1, 2, 3, or 4, provided that when m is 2, 3 or

4, plural R_{32} s may be the same or different; J_4 represents a group selected from $^*-O-$, $^*-NR_1-$, $^*-S-$, $^*-SO-$, $^*-SO_2-$, $^*-POO-$, $^*-CO-$, $^*-COO-$, $^*-NR_2CO-$, $^*-NR_3COO-$, $^*-NR_4CONR_5-$, $^*-OCO-$, $^*-OCONR_6-$, $^*-CONR_7-$, $^*-NR_8SO-$, $^*-NR_9SO_2-$, $^*-SONR_{10}-$, $^*-SO_2NR_{11}-$ or $^*-OCOR_{12}-$, in which symbol "*" represents that the group bonds to the ultraviolet absorbent structure at the position "*" (on the side of J_4 opposite Sp_4) and R_1 through R_{12} independently represent the same as R_1 through R_{11} denoted in formula (1) above; and Sp_4 represents a divalent linkage which may have a halogen atom or a substituent, formula (7)

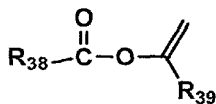


wherein R_{33} and R_{34} independently represent a halogen atom or a substituent; o represents 0, 1, 2 or 3, provided that when o is 2 or 3, plural R_{34} s may be the same or different; s represents 0, 1, 2, 3 or 4, provided that when s is 2, 3 or 4, plural R_{33} s are the same or different; J_5 represents a group selected from $^*-O-$, $^*-NR_1-$, $^*-S-$, $^*-SO-$, $^*-SO_2-$, $^*-POO-$, $^*-CO-$, $^*-COO-$, $^*-NR_2CO-$, $^*-NR_3COO-$, $^*-NR_4CONR_5-$, $^*-OCO-$, $^*-OCONR_6-$, $^*-CONR_7-$, $^*-NR_8SO-$, $^*-NR_9SO_2-$, $^*-SONR_{10}-$, $^*-SO_2NR_{11}-$ or $^*-OCOR_{12}-$, in which symbol "*" represents that

the group bonds to the ultraviolet absorbent group at the position "*" (on the side of J₅ opposite Sp₅) and R₁ through R₁₂ independently represent the same as R₁ through R₁₁ denoted in formula (1) above; and Sp₅ represents a divalent linkage which may have a halogen group or a substituent, formula (8)

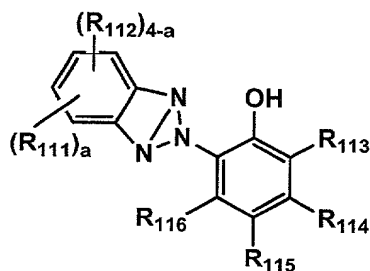


formula (9)



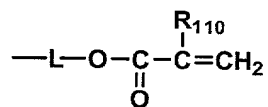
wherein R₃₅ through R₃₆ independently represent a halogen atom or a substituent; r represents 0, 1, 2 or 3, provided that when r is 2 or 3, plural R₃₆s are the same or different; q represents 0, 1, 2, 3 or 4, provided that when q is 2, 3 or 4, plural R₃₅s may be the same or different; R₃₇ through R₃₉ independently represent a hydrogen atom, a halogen atom or a substituent; and Sp₆ represents a divalent linkage which may have a halogen atom or a substituent,

formula (19)



wherein R_{111} represents a halogen atom or a substituent positioned on the benzene ring through an oxygen atom, a nitrogen atom or a sulfur atom; R_{112} represents a hydrogen atom, a substituted or unsubstituted aliphatic group, a substituted or unsubstituted aromatic hydrocarbon group or a substituted or unsubstituted heterocyclic group; a represents an integer of from 1 to 4, provided that plural R_{111} s or plural R_{112} s may be the same or different; R_{113} , R_{115} , and R_{116} independently represent a hydrogen atom, a substituted or unsubstituted aliphatic group, a substituted or unsubstituted aromatic hydrocarbon group or a substituted or unsubstituted heterocyclic group; R_{114} represents a substituent positioned on the benzene ring through an oxygen atom or a nitrogen atom; and at least one of R_{111} through R_{116} has a group represented by the following formula (20),

formula (20),



wherein L represents a divalent linkage or a simple bond;
and R₁₁₀ represents a hydrogen atom or a substituted or
unsubstituted alkyl group.

2. The cellulose ester film of claim 1, wherein the
cellulose ester film has a transmittance at 380 nm of 0 to
10%.

3. The cellulose ester film of claim 1, wherein the
cellulose ester film has a haze of 0 to 0.5.

4. The cellulose ester film of claim 1, wherein the
ultraviolet absorbent polymer is a copolymer of the
repeating unit represented by formula (1), (2), (6), (7) or
(19) or a repeating unit having an ultraviolet absorbent
structure represented by formula (3), (4) or (5) with
another ethylenically unsaturated monomer.

5. The cellulose ester film of claim 4, wherein the
ethylenically unsaturated monomer is acrylic ester

comprising a hydroxy group or an ether bond or methacrylic ester comprising a hydroxy group or an ether bond.

6. The cellulose ester film of claim 1, wherein the ultraviolet absorbent polymer is the copolymer of a repeating unit represented by formula (6) and a monomer unit derived from another ethylenically unsaturated monomer, the content of the repeating unit represented by formula (6) in the copolymer being 1 to 45% by weight.

7. The cellulose ester film of claim 6, wherein the ethylenically unsaturated monomer is acrylic ester comprising a hydroxy group or an ether bond or methacrylic ester comprising a hydroxy group or an ether bond.

8. The cellulose ester film of claim 1, wherein the ultraviolet absorbent polymer is the copolymer of a repeating unit represented by formula (7) and a monomer unit derived from another ethylenically unsaturated monomer, the content of the repeating unit represented by formula (7) in the copolymer being 1 to 55% by weight.

9. The cellulose ester film of claim 8, wherein the ethylenically unsaturated monomer is acrylic ester

0050167 00004
TOP SECRET

comprising a hydroxy group or an ether bond or methacrylic ester comprising a hydroxy group or an ether bond.

10. The cellulose ester film of claim 1, wherein the ultraviolet absorbent polymer is the copolymer of a repeating unit represented by formula (19) and a monomer unit derived from another ethylenically unsaturated monomer, the content of the repeating unit represented by formula (19) in the copolymer being 1 to 55% by weight.

11. The cellulose ester film of claim 1, wherein the ultraviolet absorbent polymer is the copolymer of a repeating unit represented by formula (7) and a monomer unit derived from another ethylenically unsaturated monomer, and wherein in formula (7), s and o are not simultaneously zero.

12. The cellulose ester film of claim 11, wherein the content of the repeating unit represented by formula (7) in the copolymer is 1 to 55% by weight.

13. The cellulose ester film of claim 1, wherein the cellulose ester of the cellulose ester film is a lower fatty acid ester of cellulose.

14. The cellulose ester film of claim 1, wherein the compound having an ultraviolet structure represented by formula (3), (4), or (5), or the monomer, from which the repeating unit having an ultraviolet structure represented by formula (1), (2), (6), (7), or (19) is derived, has a molar extinction coefficient at 380 nm of not less than 4000.

15. The cellulose ester film of claim 1, wherein the compound having an ultraviolet structure represented by formula (3), (4), or (5), or the monomer, from which the repeating unit having an ultraviolet structure represented by formula (1), (2), (6), (7), or (19) is derived, has a molar extinction coefficient at 380 nm of not less than 4000, and a ratio of molar extinction coefficient at 380 nm to molar extinction coefficient at 400 nm of not less than 20.

16. The cellulose ester film of claim 1, wherein the ultraviolet absorbent polymer has a weight average molecular weight of 2,000 to 20,000.

17. The cellulose ester film of claim 1, wherein the cellulose ester film is a member for constituting a liquid crystal display.

18. The cellulose ester film of claim 17, wherein the cellulose ester film is a polarizing plate protective film.

19. The cellulose ester film of claim 17, wherein the cellulose ester film is a support for an optical compensation film.

20. The cellulose ester film of claim 1, wherein the thickness of the cellulose ester film is 5 to 200 μm .

21. The cellulose ester film of claim 20, wherein the thickness of the cellulose ester film is 20 to 65 μm .

22. A polarizing plate comprising a first polarizing plate protective film, a polarizing element and a second polarizing plate protective film, wherein at least one of the first polarizing plate protective film or the second polarizing plate protective film is the cellulose ester film of claim 1.

23. The polarizing plate of claim 22, wherein the cellulose ester film comprises an ultraviolet absorbent polymer which is a copolymer of a repeating unit represented by formula (7) and a monomer unit derived from another ethylenically unsaturated monomer, the content of the repeating unit represented by formula (7) in the copolymer being 1 to 55 weight %.

24. A liquid crystal display comprising a first polarizing plate, a second polarizing plate, and a liquid crystal cell provided between the first and second polarizing plates, the first polarizing plate being arranged on the viewer side of the display, wherein the first polarizing plate has a first film, a second film and a first polarizing film between the first and second films so that the second film is provided on the first polarizing film on the liquid crystal cell side, the second polarizing plate has a third film, a fourth film and a second polarizing film between the third and fourth films so that the third film is provided on the second polarizing film on the liquid crystal cell side, and at least one of the first, second, third and fourth films is the cellulose ester film of claim 1.

